

LISTING OF THE CLAIMS

Claim 1 (Previously Presented) A blow moulding apparatus for producing hollow bodies of plastic material obtained from respective preforms, comprising:

at least one blow-moulding die configured to contain a plurality of cavities, each cavity being configured for blow moulding respective preforms,

a main conduit operable to supply gas into the plurality of cavities provided inside the at least one blow-moulding die,

a low-pressure gas supply source connected to said main conduit via a first supply channel,

a first controlled valve provided to the first supply channel,

a high-pressure gas supply source connected to said main conduit via a second supply channel, and

a second controlled valve provided to the second supply channel,

wherein the second supply channel includes a differential pressure measuring device operable to detect and measure a presence or an absence of a gas flow passing through the second supply channel at a pre-determined time after a blow-moulding phase has started.

Claim 2 (Canceled)

Claim 3 (Previously Presented) The blow moulding apparatus according to claim 1, wherein the differential pressure measuring device includes

at least two partially hollow tubes arranged so as to extend crosswise across the second supply channel,

the at least two partially hollow tubes being positioned in different sections such that one partially hollow tube is situated at a more downstream location and the other partially hollow tube is situated at a more upstream location along the flowpath of the second supply channel ,

each partially hollow tube being provided with a respective port on a side of a respective surface thereof, and

each respective port being associated with a respective pressure sensor for sensing the pressure as measured inside each respective partially hollow tube.

Claim 4 (Previously Presented) The blow moulding apparatus according to claim 3, wherein one respective port is oriented against a direction of gas flow flowing in from said high-pressure gas supply source, and the other respective port is oriented in agreement with the direction of gas flow flowing in from said high-pressure gas supply source, in such a manner that the respective ports are exposed to at least part of a dynamic pressure and at least part of a dynamic negative pressure entrained by the gas flow, respectively.

Claim 5 (Previously Presented) The blow moulding apparatus according to claim 1, wherein the differential pressure measuring device includes

two hollow, mutually aligned tubes arranged so as to extend crosswise across the second supply channel, substantially in the same section thereof,

each hollow, mutually aligned tube being provided with a respective port on a side of a respective surface thereof, the respective ports being aligned with a direction of gas flow of, but oriented in a substantially opposite manner,

each one of the respective ports being associated with a respective pressure sensor for sensing the pressure as measured inside each respective hollow, mutually aligned tube.

Claim 6 (Previously Presented) The blow moulding apparatus according to claim 1, wherein the differential pressure measuring device includes

a single hollow tube arranged so as to extend crosswise across the second supply channel, the single hollow tube being provided with two distinct ports in a surface thereof, in which a first port is oriented against a direction of gas flow flowing in from said high-pressure gas supply source, and a second port is oriented in agreement with the direction of gas flow flowing in from said high-pressure gas supply source, in such a manner that the two distinct ports are exposed to at least part of a dynamic pressure and at least part of a dynamic negative pressure entrained by the gas flow, respectively.

Claim 7 (Previously Presented) The blow moulding apparatus according to claim 6, wherein the single hollow tube is closed internally by an appropriate partition wall configured at a location between the first port and the second port, in such a manner that in the single hollow tube there are created two distinct chambers opening independently into the second supply channel.

Claim 8 (Previously Presented) The blow moulding apparatus according to claim 5 wherein the two mutually aligned tubes include two non-communicating inner cavities, and the differential pressure measuring device includes two distinct pressure sensors operable to detect a pressure within the two non-communicating inner cavities.

Claim 9 (Previously Presented) The blow moulding apparatus according to claim 6, wherein the single hollow tube includes two non-communicating inner cavities, and the differential pressure measuring device includes two distinct pressure sensors operable to detect the pressure within the two non-communicating inner cavities.

Claim 10 (Previously Presented) The blow moulding apparatus according to claim 7, wherein the single hollow tube includes two non-communicating inner cavities, and the differential pressure measuring device includes two distinct pressure sensors operable to detect the pressure within the two non-communicating inner cavities.

Claim 11 (Previously Presented) The blow moulding apparatus according to claim 1, further comprising a processing means for receiving a measurement signal from the differential pressure measure device and for generating a control signal regarding a defective container detected during blow-moulding.